

# Greenville County

## Cancer Profile

September 2012



### **What Is Cancer?**

Cancer is the second leading cause of death in the United States and in South Carolina. Cancer is not one disease, but a group of diseases. For example, lung cancer is a completely different disease than colorectal cancer. All cancers have one thing in common, they can grow and spread uncontrollably if not diagnosed at an early stage and properly treated.

Cancer is caused by many things, like smoking, poor diet, and/or family history. The greatest risk factor for any cancer is increasing age. As people age, their risk of getting cancer increases. Men and women have different risks of developing cancer. In the United States, one out of two men and one out of three women will have cancer in his or her lifetime.

### **What Is Cancer Incidence?**

Cancer incidence is a measure of how many new cancer cases occurred in a certain period of time. A cancer incidence rate tells how many people were diagnosed with cancer per 100,000 people in the population. (For example, a cancer incidence rate of 400 means that for every 100,000 people, 400 were diagnosed with cancer).

Incidence rates are age-adjusted, meaning the age structure of the population is taken into account. One county may have a larger number of elderly persons than another county. Adjusting for age differences allows us to compare county rates. Incidence rates are age-adjusted to the 2000 US standard population.

Table 1 shows selected cancers and the total cancers diagnosed in Greenville County between 2005 and 2009.

The table shows the number of cases and the age-adjusted rates for these cancers in Greenville County and in South Carolina. The last column shows how Greenville County ranks in comparison to the other 45 counties in South Carolina. A rank of 1 means that Greenville County has the highest rate of any county, while a rank of 46 means that Greenville County has the lowest rate of any county.

Table 1. Incidence Data\* for Selected Newly Diagnosed Cancers, 2005-2009

Cancer Type	SC	Greenville County		
	Age-Adjusted Rate	Age-Adjusted Rate	New Cases	Rank
Breast (Female)	122.0	125.8	1,534	16
Prostate	160.2	182.8	1,819	10
Colon/Rectum	45.0	42.7	947	35
Lung/Bronchus	72.3	68.7	1,514	29
All	471.5	488.0	10,859	12

\*Does not include *in situ* cases, except for bladder.

Cancers diagnosed in late stages lessen the potential for successful treatment and raise the risk of premature loss of life. Table 2 shows the percentage of cancers diagnosed in early and late stages of disease in South Carolina and in Greenville County.

Table 2. All Cancers by Stage of Diagnosis, 2005-2009

	South Carolina	Greenville County
	Percent of all cancers	Percent of all cancers
Early Stage	51	56
Late Stage	38	37
Unknown Stage	11	7

### **What Is Cancer Mortality?**

Cancer mortality is defined as the occurrence of cancer deaths in a certain population within a given time period. Cancer mortality can be reported as either the number of deaths or as a mortality rate. A cancer mortality rate tells how many people died of cancer per 100,000 people in the population. (For example, a cancer mortality rate of 150 means that for every 100,000 people in the population, 150 died from cancer).

Cancer mortality rates are also age-adjusted, meaning that they take into account the age structure of the population. Adjusting for age allows us to compare county rates by removing differences in age structure among the counties. Mortality rates are age-adjusted to the 2000 US standard population.

Cancer mortality data for Greenville County for years 2005 to 2009 are shown in Table 3. The table lists selected types of cancer death as well as the total cancer deaths in the county. The number of deaths and age-adjusted death rates for Greenville County and South Carolina are shown. The last column shows how the county ranks in comparison to the other 45 counties in South Carolina. A rank of 1 means that Greenville County has the highest rate of any county, while a rank of 46 means that Greenville County has the lowest rate of any county.

Table 3. Mortality Data for Selected Types of Cancer Death, 2005-2009

	SC	Greenville County		
Cancer Type	Age-Adjusted Rate	Age-Adjusted Rate	Deaths	Rank
Breast (Female)	23.9	22.8	285	35
Prostate	26.8	21.5	168	40
Colon/Rectum	16.8	16.4	356	31
Lung/Bronchus	56.5	52.7	1,159	37
Pancreas	10.9	9.1	201	40
All	186.8	175.7	3,853	39

### **Impact of Cancer on Your County**

In the United States, 1 in 2 men and 1 in 3 women will develop a life threatening cancer during their lifetime. The American Cancer Society (ACS) estimates that about 1,638,910 new cases of cancer will be diagnosed in the United States in 2012. This translates to over 4,490 new diagnoses each day. Furthermore, an estimated 577,190 people are expected to die in 2012 from cancer in the United States.

In South Carolina, ACS estimates 26,570 new cases of cancer will be diagnosed in 2012 or over 72 new cancer cases diagnosed each day, while an estimated 9,670 South Carolinians will die from cancer in 2012.

Table 4. Actual Cancer Cases\* and Deaths in SC & Greenville County, 2009

	South Carolina		Greenville County	
	New Cases	Lives Lost	New Cases	Lives Lost
All	22,593	9,080	2,196	777
Male	11,875	5,025	1,171	417
Female	10,708	4,054	1,024	360
White	16,830	6,517	1,830	632
Black	5,282	2,313	334	118

\*Does not include *in situ* cases, except for bladder.

As seen in Table 4 there was a total of **2,196** new cancer cases and **777** deaths from cancer during 2009 for Greenville County.

### Costs of Cancer to Greenville County

Using actual cancer cases for Greenville County and estimates from the National Institutes of Health, the estimated overall annual cost of cancer in Greenville County for 2010 was \$392 million; \$153 million for direct medical costs (total of all health expenditures), \$31.0 million for indirect morbidity costs (lost productivity due to illness), and \$208 million for indirect mortality costs (lost productivity due to premature death).

### Breast Cancer

Breast cancer is the most commonly diagnosed cancer among women in South Carolina. South Carolina ranks 13th in the nation for breast cancer deaths. There were **3,291** new female breast cancer cases diagnosed and **614** deaths during 2012 in South Carolina. Greenville County had **314** new female breast cancer cases and **58** breast cancer deaths in 2009. Excellent methods of early detection are available for breast cancer.

### Prostate Cancer

Prostate cancer is the most commonly diagnosed cancer among men in South Carolina. South Carolina ranks 7th in the nation for prostate cancer deaths. For South Carolina men, **3,205** new prostate cancer cases were diagnosed, and **469** died from the disease in 2009. In Greenville County in 2009 there were **337** new prostate cancer cases with **33** deaths.

### Colorectal Cancer

Colorectal cancer is the 4th most common cancer in South Carolina. South Carolina ranks 27th in the nation for colorectal cancer deaths. There were **2,000** new colorectal cancer cases and **778** colorectal cancer deaths in 2009. In Greenville County, there were **180** cases and **71** colorectal cancer deaths in 2009.

### Lung Cancer

Lung Cancer is the 1st most common cancer in South Carolina; currently South Carolina ranks 15th in the nation for lung cancer deaths. In South Carolina there were **3,508** new lung cancer cases diagnosed and **2,766** lung cancer deaths in 2009. There were **306** new cases and **221** lung cancer deaths in 2009 Greenville County.

### Pancreatic Cancer

Pancreatic Cancer is the 10th most common cancer in South Carolina and the 4th most common cause of cancer death; currently South Carolina ranks 29th in the nation for pancreatic cancer deaths. In South Carolina there were **600** new pancreatic cancer cases diagnosed and **578** pancreatic cancer deaths in 2009. There were **63** new cases and **48** pancreatic cancer deaths in 2009 Greenville County.

#### Note:

Data are subject to change as data sets are updated. Ranks include Washington DC.

The following suppression rules have been applied to the data in the text and tables above: (1) Counts of 1-4 are recorded as <5 (2) Counts of 5-9 are rounded to 10 (3) Rates resulting from counts 15 or fewer are suppressed due to the instability of calculating rates using small numbers.

#### Resources

##### SC Central Cancer Registry

<http://www.scdhec.gov/co/phsis/biostatistics/SCCCR/scccrmain.htm>

Susan Bolick, MSPH, CTR, Director  
Deborah Hurley, MSPH, Asst. Director  
SC Dep. Health Environmental Control  
(803) 896-2100  
[ehlersme@dhec.sc.gov](mailto:ehlersme@dhec.sc.gov)



##### American Cancer Society

<http://www.cancer.org/Research/CancerFactsFigures/CancerFactsFigures/index>

Nancy Cheney, Director Government Relations- SC  
South Atlantic Division  
128 Stonemark Lane  
Columbia, SC 29210  
(803) 750-1693



##### National Program of Cancer Registries

United States Cancer Statistics

<http://apps.nccd.cdc.gov/uscs/>



